**Web services**

**Types- SOAP and REST**

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| **JAX-WS** is the java API for SOAP web services. | **JAX-RS** is the java API for RESTful web services. |
| **SOAP defines its own security.- WS security** | **RESTful web services inherits security**  **measures from the underlying transport.** |
| **SOAP permits XML data format only.** | **REST permits different data format such as**  **Plain text, HTML, XML, JSON etc.** |

Rest API supports both XML and JSON format or exchange of data in simple URL. It is usually preferred for[Mobile](http://www.guru99.com/mobile-testing.html)and web apps as it makes app work faster and smoother.

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| **Web Service** | **Web API** |
| * Defined by W3C, all communication & data exchange is based on XML | * Web API communication & data exchange * could be XML, JSON or plain data |
| * It has defined standards – WSDL | * No defined standard |
| * You cannot compress the data but you can compress the HTML request | * You can compress the data |
| * Example: SOAP | * Example: REST |

**Remote desktop connection**- allows user to connect to another physical machine with his machine. You need to install RDS client on the user system, the RDS server software is installed on the server, and a remote connection is established.

**VM (virtual machine)-** You create multiple machines based on hardware configuration you need from pool of servers and then access that online from your machine. This is used to use hardware configuration that your system do not have. In this, there is no physical machine. For ex- you have 10GB ram. You create 3 machines with 4gb, 4gb and 2 gb. Then access it.